Over a Half-Million Persons May Have Crohn's Disease in the United States

Ashford D, Imhoff B, Angulo F, and the FoodNet working group, CDC, Atlanta, GA

Background: Crohn's disease, a chronic inflammation of the intestine, results in substantial morbidity and medical costs. However, population-based estimates of the prevalence of Crohn's disease are unavailable in the United States. We used CDC's emerging Infections Program (EIP) Foodborne diseases Active Surveillance Network (FoodNet) to obtain an estimate of the prevalence of self-reported Crohn's disease in the United States.

Methods: During the 12 month survey conducted in 1998 and 1999, a random sample of the population residing with the FoodNet catchment areas in California, Connecticut, Georgia, Maryland, Minnesota, New York, and Oregon were interviewed by telephone using a random digit dialing, single stage sampling method (Genesys-ID). The survey sample represented approximately 11% of the U.S. population. We asked two questions regarding Crohn's disease: 1) Do you have any chronic illness in which diarrhea is a major symptom, such as Crohn's disease, ulcerative colitis or irritable bowel disease?" and 2) "If yes, do you have Crohn's disease?"

Results: 12,755 persons were interviewed; 360 respondents had a chronic or ongoing illness in which diarrhea was a major symptom. Of these people, 27 reported having Crohn's disease, which when weighted resulted in a prevalence of 0.15%. Of the 27 respondent who reported having Crohn's disease, 24/27 (93.1%) were white, 1/27 (2.0%) was African American, 1/27 (2.1%) was American Indian or an Alaskan native, and 1/27 (2.8%) was Hispanic. The median age of the respondents was 40 years (ranging from 0 to 99 years) and the median age of the 27 respondents who reported having Crohn's disease was 45 years (ranging from 2 to 80 years).

Discussion: A prevalence of 0.15% among the Untied States population of 270 million persons suggests there may be approximately 500,000 persons with Crohn's disease in the United States. This is the first study to attempt a population based estimate of the prevalence of Crohn's Disease in the United States. The incidence and economic cost of this important disease, as well as the etiology and risk factors, should be investigated further.

Suggested citation:

Ashford D, Imhoff B, Angulo F, and the FoodNet working group, CDC, Atlanta, GA. "Over a Half-Million Persons May Have Crohn's Disease in the United States". Infectious Diseases Society of America. San Francisco, CA, October 2001.